Combined Service Area Alternative

For

The City of Fort Lauderdale

Executive Leadership

Richard B. Earle, Deputy Chief

Fort Lauderdale Fire-Rescue and Building Department

Fort Lauderdale, Florida

An applied research project submitted to the National Fire Academy as part of the Executive Fire Officer Program.

August 1998

ABSTRACT

Since the days of the bucket brigades, the fire service has always been faced with change. Today's fire service agencies face greater change at a faster pace than ever before. The Fort Lauderdale Fire-Rescue and Building department is no exception to this trend.

The department is faced with certain change regarding the current provision of EMS services. The Municipal Service Benefit Unit (MSBU) interlocal agreement with Broward County, through which the service is now provided, is scheduled to expire in October 1999. The MSBU agreement requires the parties to notify each other of their intentions to renew or allow the agreement to expire by January 1999.

Current service levels of the MSBU are far from adequate. The department must have alternative plans for the provision of this critical service. A major concern is that there has been no assimilation or analysis of data for any alternative service delivery platforms. One possible alternative is a Combined Service Area (CSA). This would consist of an interlocal agreement between Fort Lauderdale and other cities to provide fire and EMS service both within their jurisdictional boundaries and in the adjacent unincorporated areas.

The purpose of this research was to determine the operational feasibility of such a plan. The two fundamental research questions that were developed for and answered by this project were:

- Is it feasible for the City of Fort Lauderdale to create a Combined Service
 Area with adjoining municipalities for the provision of emergency fire and medical services?
- Could the proposed Combined Service Area service provision
 methodology provide quantifiable service level improvements over the
 current service levels found within the same geographical area?

A descriptive research method was used for this applied research project. The procedures utilized included a literature review on the subject of consolidations, mergers and regionalization of fire service organizations. The literature review provided a theoretical basis for the project. Actual examples of cooperative actions by fire service agencies were shown to result in positive outcomes. A large amount of data and information was collected regarding the current service provision. The data included current resources, response time, incident volume, station locations, unit workloads, maps of the involved area, radio system coverage data, response profiles, and vehicle types.

A standard of coverage was developed and cost estimates for the CSA were created. A software program provided analysis of current computer aided dispatch data for current service levels within the City of Fort Lauderdale. An operational plan was developed for the proposed Combined Service Area.

The results of the research showed that the answer to both of the research questions is yes. It is feasible for the City of Fort Lauderdale to create, with other cities, a Combined Service Area for emergency fire and medical services.

The analysis of the current service level data within the city coupled with the increased availability of resources that the CSA platform would provide, makes a better level of service under the CSA format a certainty.

The recommendation that is clearly evident from the research project is that the proposed CSA is a viable alternative to the current service methodology. Municipal jurisdictions involved in the proposed CSA should proceed from the operational plan to the next step of the process. The legal staffs of the municipalities and county should begin development of the interlocal agreement to implement the CSA program. The interlocal agreement will detail the fiscal aspects of the plan as provided by the financial officers of the jurisdictions involved. The interlocal agreement should then be presented to the policy-making bodies of the entities involved for their approval and implementation of the agreement.

TABLE OF CONTENTS



Abstract	1
Table of Contents	4
Introduction	5
Background and Significance	6
Literature Review	14
Procedures	21
Results	25
Discussion	27
Recommendations	28
References	30
Appendix A	Unincorporated Area Map
Appendix B	Response by Zone Map
Appendix C	Resource List
Appendix D	Monthly Response Time Report
Appendix E	CADAnalyst Scenario
Appendix F	Station Location Map
Appendix G	Radio System Coverage Map
Appendix H	Operational Plan

INTRODUCTION

The City of Fort Lauderdale Fire-Rescue and Building Department is at a unique crossroads regarding the future delivery of emergency fire and medical services. The City and department must soon make a decision as to the funding and organizational formats under which future emergency fire and medical services will be provided. This decision will have a significant impact on the citizens, visitors and employees of the City of Fort Lauderdale. Determining the best service delivery platform to implement is a formidable task, however the central problem is the lack of definitive data and analysis for the various alternatives.

The purpose of this applied research paper is to provide data and analysis for one of the current alternatives available to the City of Fort Lauderdale and its Fire-Rescue and Building Department. The alternative is the creation of a Combined Service Area for the provision of emergency fire and medical services to the citizens and visitors within the jurisdictional boundaries of the City of Fort Lauderdale and portions of unincorporated areas near the city.

A descriptive research methodology was used for this applied research paper. Published documents were reviewed on the subject of fire service consolidations, mergers and other alternative service delivery methods to determine the feasibility of service provision by multiple agencies. A survey was used to identify the results of multiple agency service provision in other venues. Analysis was done on the existing resources and service levels provided in the proposed service area. Extrapolations were made on the resources and service levels that would be available by utilizing a combined service area methodology.

The following research questions were answered by the study:

- Is it feasible for the City of Fort Lauderdale to create a Combined Service
 Area with adjoining municipalities for the provision of emergency fire and medical services?
- Could the proposed Combined Service Area service provision
 methodology provide quantifiable service level improvements over the
 current service levels found within the same geographical area?

BACKGROUND AND SIGNIFICANCE

The background and significance relating to this applied research topic is crucial to understanding the context under which the research was conducted and the applicability of the findings. Unfortunately, the current scenario is one with a

long and complex history that requires a rather lengthy explanation to facilitate an understanding of the situation.

The City of Fort Lauderdale is located in Broward County, which is situated in southeast Florida. It is the largest city in Broward County with approximately 160,000 residents, and serves as its urban hub. The City of Fort Lauderdale is both the business and cultural center of the county. The county courthouse, Broward Center for the Performing Arts, the central library, main county offices, along with many corporate offices, are all located in downtown Fort Lauderdale. In addition, Fort Lauderdale is a popular tourist destination for millions of visitors each year.

Broward County has a total residential population of approximately 1.3 million people distributed between 28 municipalities and the remaining pockets of unincorporated areas. The eastern border of Broward County is the Atlantic Ocean with a continuous line of older urbanized cities along the coastal area. Until the last several years these cities had experienced minimal growth and flat revenues, however during the past three years the City of Fort Lauderdale has enjoyed a renaissance of new development. The building surge has been widespread throughout the city from upscale high rise office and residential development to housing in lower socio-economic areas. The growth has increased revenues substantially and allowed for no ad valorem tax increases for two years.

The inland cities consist primarily of a mixture of older residential areas with many new large residential subdivisions with the attendant malls and stores surrounding the older areas. The growth in some of the communities has been staggering since Hurricane Andrew in 1992 caused thousands of residents of Miami-Dade County to relocate north into Broward County. The southwest section of Broward County is one of the fastest growing areas in the country.

Historically the annexation of unincorporated areas into cities has been driven by political and economic self-interest of the cities and unincorporated areas. There has never been an overall plan developed to direct rational annexation of areas within Broward County. There have been numerous battles between cities to annex areas with healthy tax bases while sections with minimal revenues are ignored by the cities, despite annexation requests by the citizens of the area. These tactics by the cities have resulted in gerrymandered jurisdictional boundaries and widely scattered pockets of unincorporated areas. The non-contiguous unincorporated areas have proven to be very difficult operationally and fiscally very expensive regarding the provision of municipal services by Broward County government.

Emergency fire and medical services in Broward County are currently provided by individual cities and by the county itself, as one of the municipal services it provides to unincorporated areas. Many older cities have a long history of providing emergency services through their own fire departments.

All of the jurisdictions are current members of a mutual aid agreement that provides a process for the giving and receiving of mutual aid within the county. The agreement has been plagued by problems when implemented for actual emergencies. Concerns have been raised that the agreement subsidizes some jurisdictions at the expense of others. A minimal service level benchmark has not been established for members of the mutual aid agreement nor for the service area in general. Each agency has developed its own standards of coverage and acceptable service levels, although many of the standards are very similar to each other.

The Broward County Fire-Rescue Department evolved from the consolidation of a group of volunteer fire departments, which were geographically scattered throughout Broward County. The consolidation turned the department into a combined department of career and volunteer personnel with many of the former volunteers becoming paid personnel. The new fire department was funded by a fire fee assessed against properties in the unincorporated areas of the county.

Following the establishment of the department, the county began, through a pilot program, to provide Advanced Life Support (ALS) service through a separate Emergency Medical Services (EMS) agency. The pilot program proved successful and a full-scale ALS support system was developed for unincorporated county areas and for those cities that chose not to provide the service. The City of

Fort Lauderdale elected to join the county system at the time. This was a three-tier system with the local fire department providing first responders, the county supplying ALS paramedics and a contracted private ambulance service providing patient transport.

The county fire and EMS systems were operated as separate agencies until the early 1990s when the two agencies were placed under one name and director. However, the actual operations of the agencies remained virtually the same and many personnel were not cross-trained as firefighter-paramedics.

As these events were occurring several cities that were receiving EMS service from the county were dissatisfied with the documented poor response times and service levels being provided by the county agency and the contracted private ambulance company. The cities explored the option of providing EMS service through their fire departments but were thwarted by a state statute that gave control of issuing "certificates of convenience and need" (CON) to the county. The certificate was required before a jurisdiction could obtain the necessary state license to operate an EMS system.

The issuance of the CON to the cities and their subsequent EMS licensure would have very serious impacts on the Broward County Fire-Rescue (BCFR) department as much of its service area was within the municipalities. The municipal service areas also generated the majority of the calls for EMS service

and provided the majority of funding for the EMS system. The removal of municipal areas from the system would require significant personnel and equipment reductions within BCFR and require a large increase in fire and EMS fees in the remaining unincorporated areas. Broward County, in an effort to protect its EMS system, refused to issue the needed certificates to any jurisdiction that wanted to operate a new EMS system.

This created an adversarial environment between the cities and Broward County. The situation was further complicated by the fact that the eleven cites that provided their own EMS service had sued Broward County on the issue of double taxation. The county had levied a countywide tax to fund its system, which was also applied to those cities supplying their own EMS service. The court held that the county must repay the tax to cities that supplied EMS service.

In 1993, the City of Fort Lauderdale and five other cities again pursued the ability to operate their own EMS systems. A long and bitter fight with Broward County Fire-Rescue ensued. The county was determined to protect the status quo on EMS service delivery. The battle was carried to the state legislature with the cities requesting a law change to take the CON process out of the county's control. In an effort to end the open political warfare between the cities and county, the county legislative delegation told the county if they did not issue CONs to cities that requested them, a law change would be forthcoming that would take the county out of the process entirely. The county reluctantly issued

the CONs to the cities. The cities pursued and obtained the needed EMS licenses from the state of Florida.

Concurrently with the battle over EMS licensure was a struggle between private ambulance companies and governmental agencies, both city and county, for the provision of EMS services. The majority of EMS service provision was placed with governmental agencies with two cities awarding contracts to private companies for EMS service.

Broward County faced the politically untenable position of laying off a significant number of BCFR personnel. The county approached the City of Fort Lauderdale with a proposal to form a Municipal Service Benefit Unit (MSBU) which under Florida law is an entity formed by interlocal agreement with the power to tax for a specific service. The MSBU agreement was structured so that no BCFR employees were laid off and the city through the Fort Lauderdale Fire-Rescue and Building department (FLFRB) obtained a CON. Since there was a great disparity in the cost to the city for self-provided vs. MSBU provided EMS services, under separate agreements the city received county funding for projects not related to EMS.

The three-year agreement, which went into effect on October 1, 1996, established a service area that encompassed the city jurisdictional limits and portions of the surrounding unincorporated areas. The agreement provided

performance-based criteria such as fractile response times to be met. If the performance criteria were not met, the county was responsible for whatever measures were necessary to bring the performance criteria into compliance, such as adding units in service. The county at the same time entered into similar agreements with other municipalities under the MSBU funding umbrella. The multiplicity of agreements has contributed to the county's inability to meet the performance benchmarks that were established under the MSBU agreement. City fire dispatch services, which previously were handled in the combined fire-police city dispatch center, were transferred to the county central dispatch center. This section of the agreement has provided a reduced level of dispatch and communications services to FLFRB to date. The issue has been the focus of much debate due to poor response times at major incidents and poor utilization of available units.

Another important note is that since the signing of the MSBU agreement there has been a dramatic change in the personnel involved in the drafting and administration of the MSBU agreement. The county administrator, assistant county administrator, and the fire-rescue department director who participated in the design and drafting of the agreement have all left county employment. The city manager and city fire chief who were involved in the creation of the agreement have left city employment. This has lead to a tumultuous operational period as there are few people managing the agreement who were actual participants in its creation.

The MSBU agreement required that notification of intent to opt out or remain as a member be made no later than the January prior to expiration of the agreement. January 1999 is the deadline for decisions relating to continuing the agreement or withdrawing. The decision will have significant impacts on the Fort Lauderdale Fire-Rescue and Building department both organizationally and operationally.

The Executive Leadership class, which is part of the Executive Fire Officer Program, instilled in its students the need to provide leadership to our organizations. An integral part of leadership is being proactive. This applied research paper is the author's attempt to be proactive regarding compiling, assimilation and analysis of data on an alternative service delivery platform. An important decision point is fast approaching the Fort Lauderdale Fire-Rescue and Building Department. A decision based on well-researched facts will better serve all involved rather than a decision based on politics or an emotional defense of past practices.

LITERATURE REVIEW

The typical service delivery platform in the fire service today is the local jurisdiction, be it a village or town, a municipality, a county or a fire district providing either a career, a volunteer or a combined department to provide

emergency fire and/or medical services. This widespread delivery system has evolved over a long time period and is firmly entrenched in the political, social and economic fabric of the communities served.

However, budgetary constraints coupled with increased demands for service have forced fire administrators to search for new service delivery methods. The literature review has illustrated that there are wide ranging and conflicting definitions on mergers and consolidations. McGaughey (1994) provides the following definitions:

Functional Consolidation

Separate fire departments are retained, but one or more duties normally performed by one department are assigned to employees of another department. Example:

Consolidated emergency dispatch services.

Partial consolidation

Separate fire departments are retained and a special group is formed to handle specific duties. Example: Joint manning of a fire station.

Operational Consolidation

Separate fire departments are combined into one unified department.

Merger

The combining of two or more governmental agencies through a legal process with the output being a single entity. (Snook, *Merger and Consolidation*, handout, 1993, p.2).

According to Pittard (1992, pp. 9-12) the areas that could benefit fire-rescue agencies from a consolidation or merger are:

- Potential for a better Insurance Services Organization rating
- Analysis and revised perspective on department and service delivery
- Economies of scale for purchases
- Philosophy that less government is better government
- Elimination of artificial service boundaries
- Stronger internal programs such as training
- Eliminates duplication of effort
- Better utilization of resources
- Cost savings
- Affords the opportunity to offer expanded or specialized services

An article in *Fire Chief* Magazine written by Chief Charles Rule supports the thought that regionalization or consolidation is a viable alternative for future delivery of emergency services. Chief Rule states that the additional responsibilities and increased demands placed on the fire service coupled with a

bleak future for its funding necessitate change (Rule, January 1992, p.32). Chief Rule specifically lists the following as potential benefits of consolidation or regionalization of the fire service:

Enhanced career opportunities, centralized training facilities and dispatch center, cost reductions through volume purchases, fewer fire stations, more efficient utilization of personnel, increased service levels for the same dollars spent, lower apparatus replacement requirements, consistent code enforcement, regional public education, elimination of duplication and better use of resources (p.33). Rule says, "the fire chief should provide the leadership to objectively pursue areas of consolidation."

Bosell (et al, 1985) in "Why Are There Regional Consolidations in the Fire Service?", said "...the big benefit is the specialization that becomes possible through the consolidated organization. The larger the organization, the better it can afford high-quality staff services, such as training, statistical analysis, research and development, fire prevention education, and structure analysis." He also states that, "Some of these savings may come from lower insurance costs, decreased property losses, more lives saved and quicker EMS response. Other indirect savings come from a more efficient service involving equipment utilization, fire prevention, code enforcement and continuity throughout the region with increased productivity (Bosell, et al, 1985)."

Olsen (1985) describes the successful merger of many departments in Orange County, Florida into one department. He states that the merger into one department has not only made the process of communications, fleet maintenance, training and personnel deployment more efficient, it has allowed for the addition of both career staffing (from 398 to 538) and number of fire stations (from 24 to 27) to better serve the community.

After reviewing twenty-six articles and publications, Peters states "...Getting and keeping your personnel involved from the start is most important. If personnel are left out of the process until it is finalized they feel threatened. This feeling is translated into opposition that is seen as a fear of loss of control and identity (Peters, 1991)." However in spite of the expected resistance to the change that occurs with mergers or consolidations the governing theme to fire service managers should be, "Service to the citizens should come first (Peters, 1991)."

"The rationale for any consolidation or merger or organization or services must be predicated on two basic assumptions. The first is that the resulting new organization must improve the level or equality of services delivered to and received by the public. The second remise is that the new organization or service be better able to meet the demands for service as efficiently or more so than the prior organizations or services (Krill, 1991)."

There is a large body of evidence in private industry that the merger or consolidation of compatible companies often results in a stronger, more efficient company. The process of merger or consolidation is a complex one and must be pursued in a rational planned manner.

James Cragan wrote in Fire Chief Magazine,

If any headway is to be made, neighboring governmental units must explore, in a cooperative manner, a restructuring process that considers alternative methods of utilizing existing manpower, equipment and allied support resources in a more efficient and effective manner, irrespective of political jurisdictions.

If you were to review the governmental data of neighboring communities, you would find that there is a potential (if political and legal constraints are ignored) for enhancing service, both qualitatively and quantitatively, and for either reducing the cost of government or expending current funds in a more efficient manner. (Cragan, p.52)

The initial response of equipment and personnel to fire emergencies usually consists of only those resources possessed by the local jurisdiction. There is a numerical increase in resources that are available for initial response under a well managed consolidation plan.

This has been demonstrated in Contra County, CA as pointed out by Streuli, "Because of the larger sources to draw from, first-alarm response has been increased by 30%. Ladder truck service has been extended to all parts of the District, many of which had no truck response at all unless called for by mutual aid. The backup strength on additional alarms is now programmed to a degree that was impossible under independent operation (Streuli, 1970, p.16)."

Managing Fire Services, published by the International City Management Association, lists the following as potential advantages to consolidation: "1) centralizing fire department management and reducing administrative costs; 2) centralizing the dispatch function and communication network; 3) improving fire service capabilities; 4) unifying fire prevention codes; and, in some cases, 5) reducing insurance premiums because of improved ISO rating.

Cobb County, Georgia, which until 1971 was serviced by eight independent fire departments, realized many of these advantages through consolidation. Prior to consolidation the county had an ISO rating of 10; after the consolidation the rating improved to 7, and the subsequent benefit passed on to homeowners was a 40% reduction in home insurance premiums. Some other examples of communities that have consolidated two or more fire departments are Pasco County, Fl; Contra Costa County, Ca; and Jacksonville, Florida."

The consensus of the authors researched in this literature review is that the consolidation, merger, or regionalization of the fire service is a useful tool. The combining of existing resources has proven to be one way to provide better service at the same or reduced cost. Although the specific situation would certainly have a great impact on the outcomes, fire agencies working together have a chance to do more with the same resources.

The literature review provided concrete evidence that when done properly combining the resources of smaller fire service jurisdictions into a larger resource pool is very beneficial to those jurisdictions. These findings encouraged proceeding with the remainder of this research project.

PROCEDURES

The procedures used in this research project consisted of a literature review that was conducted at the Learning Resource center located on the campus of the National Fire Academy and at the main Broward County library located in the City of Fort Lauderdale, Florida.

Given the positive outlook on consolidations and mergers that was found in the literature review, the research project proceeded to the data collection stage. The data was needed to determine the feasibility of providing fire services through a Combined Service Area (CSA) and if improvement in service levels could be expected through the CSA methodology.

A map was developed using the City of Fort Lauderdale's Geographical Information System (GIS). The map showed the existing city boundary and highlighted the unincorporated areas adjacent to the city that would be included in the CSA proposal (Appendix A).

Information and data was collected from the record management systems of the City of Fort Lauderdale and Broward County Fire-Rescue.

This data included call volume for individual fire zones (Appendix B); current run profiles for the fire zones, current staffing, equipment and vehicle resources allocated within the area (Appendix C). The current response times (Appendix D) and number of responses by unit were also collected utilizing data from the Broward County computer aided dispatch system.

The gathering of this data was very time consuming, as there was not a single collection point were the data was available. Often the data from various sources had to be correlated to obtain the needed reference material.

Uniform fire service standards of coverage were developed for the area as recommended in the International Fire Chiefs Association's Fire Department

Accreditation manual. Discussions were held with Herminio Lorenzo, Fire Chief of the City of Hollywood, Fire Chief Jim Henson of Oakland Park and Dania Deputy Chief Mike Brown regarding standards of coverage, current service deficiencies and communications issues.

Estimations of the costs of service provision were developed from budgetary data obtained from Broward County and the City of Fort Lauderdale.

The anticipated operational costs for the CSA plan would be approximately the same as the current operational expenditures made by Broward County. The number of personnel serving the area would remain constant, however their distribution and utilization would be changed.

The data was analyzed partially by utilizing a software program called CAD Analyst developed by Deccan Software located in San Diego, Ca. This software program analyzes historical computer aided dispatch data and shows by specific areas the ability to meet response time criteria for each type of responding fire apparatus (Appendix E). Additional analysis was conducted by utilizing time and distance surveys to determine travel and response times for areas not covered by the above software.

The determination of station locations within the unincorporated areas of the CSA was developed from information obtained from the deployment study that was completed for Broward County by David M. Giffith and Associates in April

1996. This was a comprehensive station utilization and efficiency study that recommended the closing of certain stations and redeployment of resources to increase productivity and service levels. The City of Fort Lauderdale's Geographical Information System was used to develop a map of station locations and their Insurance Service Organization's response area (Appendix F).

The City of Fort Lauderdale, in partnership with several other cities, owns a modern 800mghz-radio system purchased from Motorola company. Motorola checked the configuration of the existing system for its ability to provide coverage for the additional areas that would be in the CSA. The report showed that the system would provide good coverage to the new areas (Appendix G).

Finally, this researcher developed an operational plan for the portion of the proposed CSA area that would be the responsibility of Fort Lauderdale (Appendix H).

There are several limitations regarding this research project that must be noted. First, the data analysis showed that the CAD data determining response times and used to derive unit availability contained anomalies caused by incorrect data entry by dispatchers. The margin of error would not appear to be of a magnitude that would significantly change the response time data. Another limitation is that the data is specific for a local service area and would not be directly applicable to other service areas. The projected service improvements can

only be truly verified by actual implementation of the Combined Service area proposal. The political intricacies of forming a CSA were not explored beyond the fact that the interlocal agreement necessary for the formation of a CSA would be completely legal.

RESULTS

Current resource allocations were compared with the geographical distribution and volume of calls for service. A standard of coverage for structure fires was developed that closely followed the current coverage found in the city of Fort Lauderdale. That coverage is the initial response of three engines, one quint, one medical rescue and one chief officer for a total of approximately sixteen personnel.

This number of personnel allows for the simultaneous completion of critical tasks such as search, rescue, and fire fighting. Safety and operational mandates, required by agencies as the National Fire Protection Association and the Occupational Safety and Health Agency, such as the two in – two out rule and rapid intervention crews can be meet with this number of personnel. The important component of how quickly all of the resources arrive on the emergency scene was also considered. A time of ten minutes was established for this benchmark.

The results of this research indicate that the answer to both of the research questions is yes.

Is it feasible for the City of Fort Lauderdale to create a Combined Service
 Area with adjoining municipalities for the provision of emergency fire
 and medical services?

The answer is based on the fact that regionalization concepts that have proven successful in other areas of the United States and results of those areas would be applicable to the Fort Lauderdale area. The research conducted by this author reveals no significant reason, from an operational or fiscal perspective, why the CSA format would not work.

Could the proposed Combined Service Area service provision
methodology provide quantifiable service level improvements over the
current service levels found within the same geographical area?

Research has shown that the current level of service provided in the unincorporated areas of Broward County, adjacent to the City of Fort Lauderdale, is less than adequate by recognized performance standards. One example is the long travel distances required by the current geographical distribution of resources. Resource distribution coupled with the very high call volumes for some units (Engine 14, Medical 14) results in unacceptable response times.

The current service level does not provide enough resources to handle a structure fire incident in a timely manner. This is shown by the inability of the current system to place enough personnel on scene in a timely manner to accomplish all of the tasks required at a fire emergency. Nor does it provide sufficient resources to ensure firefighter safety, as shown by the system's failure to meet basic nationally recognized safety standards for fire operations.

Analysis of the response profiles of the city compared to the county profiles indicates that the number of personnel sent to structure fire emergencies under the CSA would be 23% greater than the number currently deployed.

Response time data for municipal units is shown to be 5.22 minutes, compared to 6.04 minutes for county units. Call volumes, demographics, geography of the area and road systems of unincorporated areas are comparable to those found in the adjacent cities. This supports the assumption that a similar level of resources placed in the unincorporated areas and managed, as city resources are, would yield service levels comparable to those in the city.

DISCUSSION

The literature review portion of this research revealed that most authors felt that regionalization, mergers or consolidations of fire service provision are

positive events. A long list of potential advantages for agencies involved with these activities was provided by the literature.

Among these advantages was the ability to improve the quantity and speed with which fire resources could be deployed to an emergency scene in a regionalized system. Analysis of the data from the areas within the proposed CSA shows that improved service is assured under the new service provision platform. The improved service would be in the form of an adequate firefighting team delivered on scene under the ten-minute benchmark. This is critical at high rise buildings and large warehouses involved in fire.

It is readily apparent that enough resources exist in the CSA, and can be utilized in a more efficient manner, to provide fire protection to meet recognized performance standards and safety mandates. The cities are currently providing that type of service within their boundaries. Combining resources and deleting boundaries would allow the unincorporated areas to enjoy similar service at the same cost.

RECOMMENDATIONS

Potential service level improvements shown by the data are significant. The resources available for incidents would be increased as the assets of all agencies are pooled together. This would make compliance with safety mandates possible

with the additional personnel deployed to the emergencies. Given that the overall number of personnel and apparatus in the area will be unchanged, there is no negative budgetary impact anticipated for any of the organizations.

The implications for the Fort Lauderdale Fire-Rescue and Building department would be considerable. The department would have increased resources available for daily operations and large incidents. The time required to place units on scene at a major incident through the current mutual aid system would be much reduced, as there would be immediate access to a larger number of apparatus and personnel. An additional benefit would be from consolidated training programs and integrated incident command systems.

The recommendation that is clearly evident from the research project is that the proposed CSA is a viable alternative to the current service methodology. Municipal jurisdictions involved in the proposed CSA should proceed from the operational plan to the next step of the process. The legal staffs of the municipalities and county should begin development of the interlocal agreement to implement the CSA program. The interlocal agreement will detail the fiscal aspects of the plan as provided by the financial officers of the jurisdictions involved. The interlocal agreement should then be presented to the policy-making bodies of the entities involved for their approval and implementation of the agreement.

REFERENCES

Bosell, Larry; Chiesa, Adele; Hardin, John; Hughes, Kenneth; Irwin, Fred;
McMullan, Donald; Roberts, James; Sangder, Charles; Schueller, Ralph.
(1985). Why Are There Regional Consolidations in the Fire Service?
Applied Research Project. (Emmitsburg, MD; National Fire Academy).

Broward County Fire-Rescue Department Budget, Fiscal Year 1996-1997 and 1997-1998.

Broward County Fire-Rescue Department Response Time Monthly Reports for 1997-1998.

Brunacini, Alan; Clark, W.E.; Foldy, W.; Gratz, D.B.; Randleman, B.; Robertson, J.C.; Royer, K.; Trench, N.D. (1986). Wingspread III, Statements of National Significance to the Fire Problem in the United States, Iowa State University, The Johnson Foundation, p. 9.

City of Fort Lauderdale Fire-Rescue and Building Department Budget, Fiscal Year 1996-1997 and 1997-1998.

Coleman, Ronny J. and Granito, John A. <u>Managing Fire Services, Second</u>
Edition. (1988) International City Management Association.

Corwin, Scott L.; Sweeney, Patrick J.; Weinstein, Harold P.; Facing the people issues of M & A's. Management Review. (April 1991). pp. 47-50.

Cragan, James G., (April 1984). Fire Department Mergers, <u>Fire Chief Magazine</u>. pp. 52-53.

International Association of Fire Chiefs, (1996). <u>Fire Department Accreditation</u>

<u>Manual.</u>

Krill, John P., (July 1991). Fire Service Consolidation – Alaska Style, Applied Research Project. (Emmitsburg, MD; National Fire Academy).

McGaughey, James M., (1994). <u>Strategic Analysis of Fire Department</u>

<u>Operations, Applied Research Project</u>. (Emmitsburg, MD; National Fire Academy).

Olsen, Rich, (April 1985). Orange County's Successful Fire Department Merger, Fire Chief Magazine, p. 64.

Peters, Michael J. (1991). <u>Consolidation/Merger: So Much Discussion, So Little</u>

<u>Action, Applied Research Project</u>. (Emmitsburg, MD; National Fire

Academy).

Pittard, Floyd L., (1992). <u>A Systematic Approach to Functional Consolidation</u> and Merger, Third Edition. Tualatin Valley Fire and Rescue, pp. 2, 8, 9-12, 15, 41-42.

Rule, Charles H., (August 1976). Could Reorganization Solve Your Problem?, Fire Chief Magazine, pp. 68-71.

Rule, Charles H., (January 1992). Consolidation/Regionalization – Answers for the Future, Fire Chief Magazine, pp. 32-34.

Snook, Jack, (1993). Merger and Consolidation, handout, Tualatin Valley Fire and Rescue, pp. 2-5.

Streuli, A.V., (November 1970). Consolidation of Fire Districts, <u>Fire Journal</u>, pp. 15-17.

Thomas, Jan, (March 1994). When One Plus One Makes One, <u>Fire Chief</u>, pp. 105-106.